

Work Order ID 150317

Wednesday, August 24, 2016 11:40:44 AM

150317

Page 1

Item ID: D4858-041L02**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Item Name:** Dome Light Housing Assembly, Black**Stop *NS2*****Start Date:** 8/22/2016 **Start Qty:** 1.00 ***1*****Cust Item ID:****Required Date:** 8/24/2016 **Req'd Qty:** 1.00 ***1*****Customer:****Reference:**

Approvals: **Process Plan:** DAS 21 **Date:** AUG 26 2016 **Tooling:** _____ **Date:** _____
QC: 9-89 **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1***Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4858	A

100

0.00

100

HandThermo

Memo

0.00

Hand Finishing Thermoforming

Pick Kit

DAS
07
9-89

16/09/14

110

0.00

110

Small Fab

Memo

0.28

Small Fab

Assemble as per Dwg D4858-041

DAS
07
9-89

16/09/14

1) Install air vents

2) Install lights

3) Install rheostats

4) Install wiring harness

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐							
		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 150317

Wednesday, August 24, 2016 11:40:44 AM

150317

Page 2

Item ID: D4858-041L02 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Dome Light Housing Assembly, Black
Start Date: 8/22/2016 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 8/24/2016 Req'd Qty: 1.00 *1* Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing Memo	0.00 0.00				1			AS 38 9-89 SEP 15 2016
130 *130* Packaging Packaging	Identify as per dwg & Stock Location <u>MFO03</u> Memo	0.00 0.00				1			DAS 6 9-89 SEP 15 2016
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.02							17/09/18 J Closed 16/09/27

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date ☐	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified ☐	☐	Past Due	☐				

Picklist Print

Wednesday, August 24, 2016 11:40:44 AM

Page 1

Work Order ID: 150317

150317

Parent Item: D4858-041L02

D4858-041L02

Parent Item Name: Dome Light Housing Assembly, Black

Start Date: 8/22/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev. A New Issue 13/09/13 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4858-1L02		Manufactured	No			100	Each	5.0000	1	1			

D4858-1L02

Dome Light Housing, Black

Location

Loc Qty

Loc Code

MF001

5

118896

2

125729

3

D4886-1

Manufactured

No

100

Each

3.0000

2

2

D4886-1

Air Vent

Location

Loc Qty

Loc Code

MF005

3

141981

3

D4897-041

Manufactured

No

100

Each

9.0000

1

1

D4897-041

Dome Light Wiring

Location

Loc Qty

Loc Code

MF007

9

142110

5

147796

4

D4898-1

Manufactured

No

100

Each

54.0000

12

12

D4898-1

Screw, Stainless Steel

Location

Loc Qty

Loc Code

MF006

54

141124

54

SEP 14 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
200 3 200 200 3 200									
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Page 2

Work Order ID: 150317

150317

Parent Item: D4858-041L02

D4858-041L02

Parent Item Name: Dome Light Housing Assembly, Black

Start Date: 8/22/2016

Required Date: 8/24/2016

Start Qty: 1.00

Required Qty: 1.00

D4906-1 Manufactured No

100

Each

4.0000

1

1

D4906-1

Knob

DAS
6
9-88

Location

Loc Qty

Loc Code

MF006

4

128364

4

MS21042L06

Purchased

No

100

Each

148.0000

12

12

MS21042L06

Nut

DAS
6
9-88

Location

Loc Qty

Loc Code

ST303

148

m135046

100

m135274

48

NAS1149F0663P

Purchased

No

100

Each

123.0000

3

3

NAS1149F0663P

WASHER

DAS
6
9-88

Location

Loc Qty

Loc Code

ST262

123

M134365

123

NAS1149FN632P

Purchased

No

100

Each

67.0000

12

12

NAS1149FN632P

Washer

DAS
6
9-88

Location

Loc Qty

Loc Code

ST263

67

m129163

67

SEP 14 2016

Wednesday, August 24, 2016 11:40:44 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

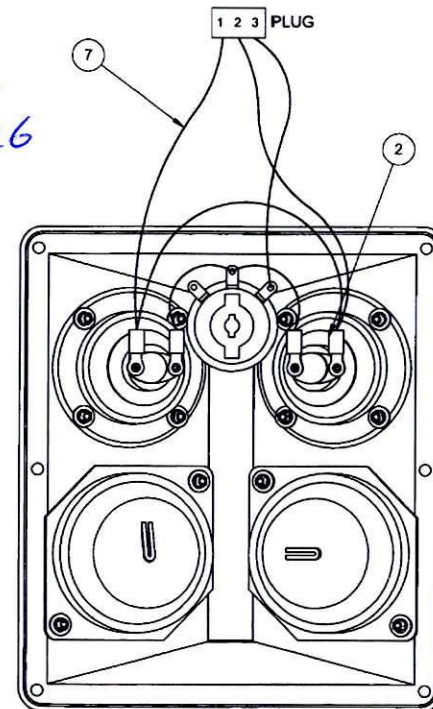
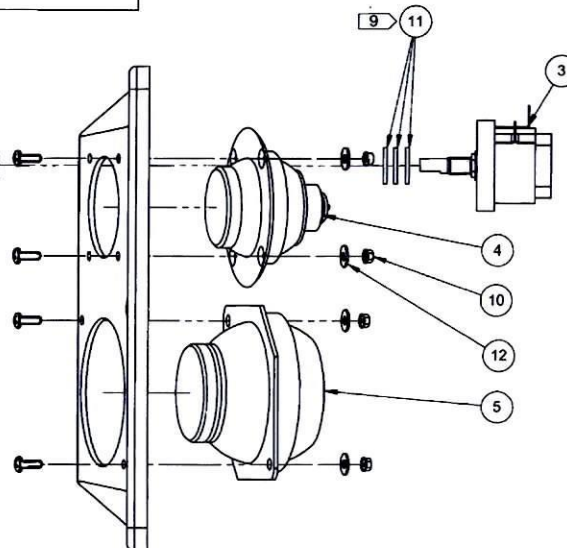
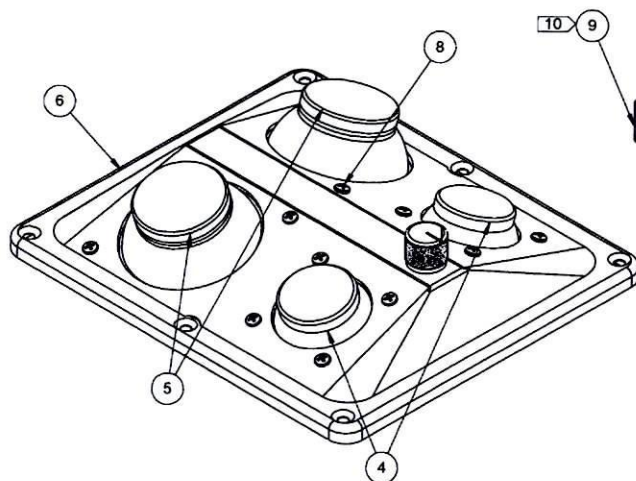
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : 24/03/2014		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	Past Due ☐							

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4858-041	DOMELIGHT HOUSING ASSEMBLY
2	4	D4290-21 (REF)	RING TERMINAL (PART OF D4897-041)
3	1	D4864-1 (REF)	RHEOSTAT (PART OF D4897-041)
4	2	D4872-1 (REF)	LIGHT FIXTURE (PART OF D4897-041)
5	2	D4886-1	AIR VENT
6	1	D4858-1	DOMELIGHT HOUSING
7	1	D4897-041	DOMELIGHT WIRING HARNESS
8	12	D4898-1	SCREW
9	1	D4906-1	KNOB
10	12	MS21042L06	NUT
11	3	NAS1149F0663P	WASHER
12	12	NAS1149FN632P	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 150317 MLJ
1608-26



D4858-041 DOME LIGHT AIR VENT ASSEMBLY

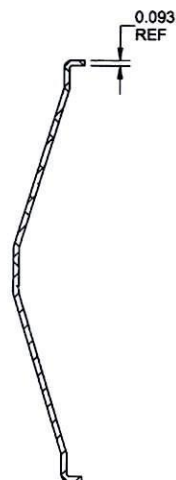
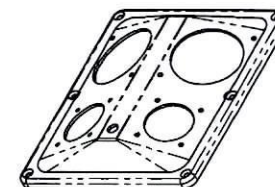
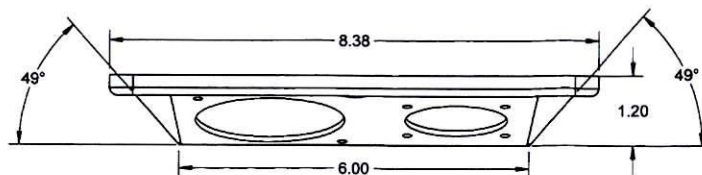
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.32 lbs
- 8) REPLACES GENEVA P/N G12983 P112-X
- 9) OPTIONAL: USE ADDITIONAL WASHERS TO SHIM AS REQUIRED
- 10) NUT INCLUDED WITH RHEOSTAT

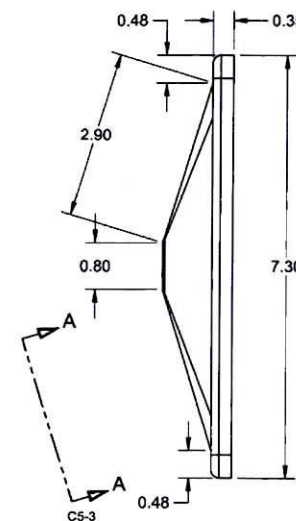
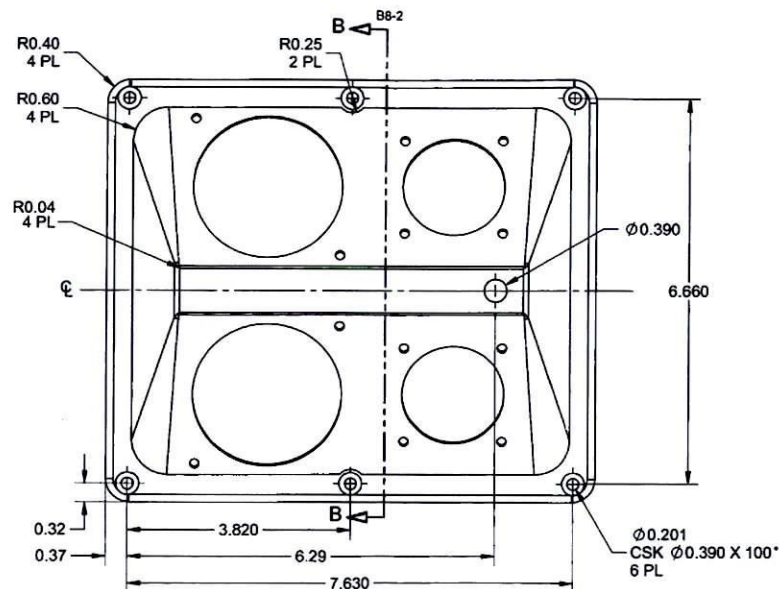
RELEASED
2013-09-16

A	NEW ISSUE	DESCRIPTION	BY	DATE
REV.				
DESIGN		DART AEROSPACE USA, INC.		
DRAWN		KENT, WA		
CHECKED		DRAWING NO.	REV. A	
MFG. APPR.		D4858	SHEET 1 OF 3	
APPROVED		TITLE	SCALE	
DE APPR.		DOME LIGHT AIR VENT ASSY	NTS	
DATE	13.07.24	COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS UNCLASSIFIED AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		

8 7 6 5 4 3 2 1



SECTION B-B
B5-2



RELEASED
2013-09-16

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) TOOLING: THERMOFORM PER MOLD DT9933 PER QSI 022 TRIM PER DT9933
- 3) FINISH: N/A
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: N/A
- 8) WEIGHT: 0.22 lbs
- 9) REPACES GENEVA P/N G12985
- 10) PART SHAPE AND GEOMETRY IS CONTROLLED BY TOOLING
- 11) MINIMUM THICKNESS AFTER FORMING IS 0.060" FOR FLANGES AND 0.070" ELSEWHERE

D4858-1 DOME LIGHT HOUSING

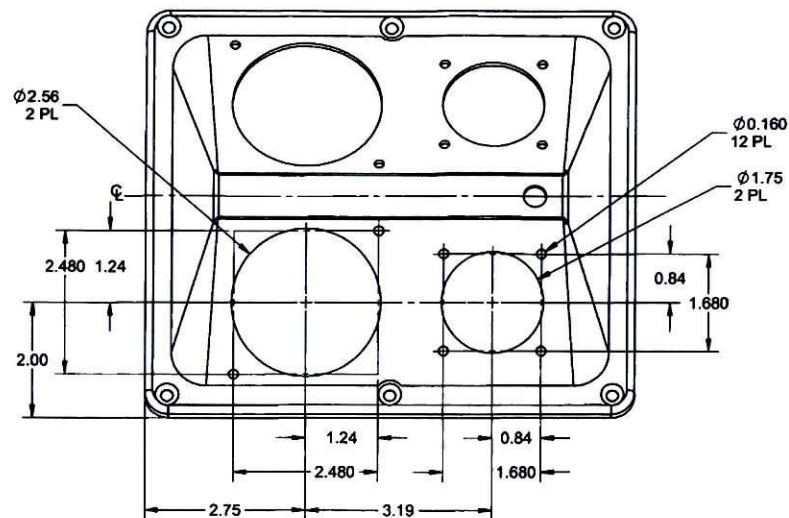
PART NUMBER	DESCRIPTION
D4858-1LBL	F6006 SUEDE/POLISHED 701 BLACK LEXAN SHEET 0.093 THICK (REF DART SPEC MLEXS.093-F6006-02)
D4858-1LLG	F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK (REF DART SPEC MLEXS.093-F6006-07)

DESIGN	
DRAWN	
CHECKED	
MFG. APPR.	
APPROVED	
DE APPR.	
DATE	13.07.24

DART AEROSPACE USA, INC.
KENT, WA

DRAWING NO.	REV. A
D4858	SHEET 2 OF 3
TITLE	SCALE
DOME LIGHT AIR VENT ASSY	NTS
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8 7 6 5 4 3 2 1



VIEW A-A
B3-2

RELEASED
2013-09-16
MR

DESIGN	OS	DART AEROSPACE USA, INC.	
DRAWN	OS	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	HL	D4858	SHEET 3 OF 3
APPROVED	HL	TITLE	SCALE
DE APPR.	HL	DOMELIGHT AIR VENT ASSY	NTS
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